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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,169	10/29/2003	You-Young Jung	1349.1266	7130

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EXAMINER
TAYLOR, VICTOR J

ART UNIT	PAPER NUMBER
2863	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
Office Action Summary	10/695,169	JUNG, YOU-YOUNG
	Examiner	Art Unit	
	Victor J. Taylor	2863	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>12 October 2006</u>.

2a)☒ This action is FINAL.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>2-6 and 8-17</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>2-6</u> is/are allowed.

6)☒ Claim(s) <u>8-13, 16 and 17</u> is/are rejected.

7)☒ Claim(s) <u>14 and 15</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>29 October 2003</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>11/30/2006</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-17 are pending in the instant application. The applicant has canceled

claims 1 and 7. Therefore, claims 2-6 and 8-17 are presented for examination. Claims

2-6 were previously indicated as allowed.

Priority

2.   Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e)

or under 35 U.S.C. 120, 121, or 365(c) is acknowledged.

Drawings

3.   The drawings are objected to under 37 CFR 1.83(a) because they fail to show

the computer and data storage for storing the motion value data as described in the

claim limitations and as described in the specification.

4.   Any structural detail that is essential for a proper understanding of the disclosed

invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing

sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to

avoid abandonment of the application. Any amended replacement-drawing sheet should

include all of the figures appearing on the immediate prior version of the sheet, even if

only one figure is being amended. The figure or figure number of an amended drawing

should not be labeled as "amended." If a drawing figure is to be canceled, the

appropriate figure must be removed from the replacement sheet, and where necessary,

the remaining figures must be renumbered and appropriate changes made to the brief

description of the several views of the drawings for consistency. Additional replacement

sheets may be necessary to show the renumbering of the remaining figures. Each

drawing sheet submitted after the filing date of an application must be labeled in the top

margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If

the examiner does not accept the changes, the applicant will be notified and informed of

any required corrective action in the next Office action. The objection to the drawings

will not be held in abeyance.

Information Disclosure Statement

5.   The information disclosure statement (IDS) submitted on 30 November 2006.

This submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the

examiner is considering the information disclosure statement.

Response to Arguments

6.   Applicant's arguments filed 12 October 2006 for the 35 USC 101 rejection of 12

July 2006 have been fully considered but they are not persuasive.

The applicant argues the wording of the preamble wherein the machine for "a

machine readable storage storing a program for controlling a processor with a process"

likes weight for the required limitations. Furthermore the machine-readable storage

could comprise a readable IBM punch data card as commonly used in the prior data

storage arts. In addition, the claim limitations for claim 17 fail to find support for the

removing step and computer processes in the drawing figures wherein the computer

processes fail to discloses the necessary storage units and computer processor in the

drawing. Furthermore claim 17 recites a desired machine-readable storage wherein the

storage program limitation steps appear indefinite and recite a desired result for

removing spurious regions and fail to recite the necessary steps in the limitation for

storage of the required program.

The 35 USC 101 rejection on 12 July 2006 for claim 17 directed to non-statutory

subject matter is still valid. Cancellation of the claim or corrections by amendment is

required. See MPEP 2106 and United States Patent and Trademark Office Interim

Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility

OG Notices: 22 November 2005 and the 101 issues as found in the inter-net location,

http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm.

7.   Applicant's arguments filed 12 October 2006 for the 35 USC 102 (b) rejection of

12 July 2006 of claims 13 and 16 and 17 have been fully considered but they are not

persuasive.

The applicant argues motion information values wherein the cited art teaches

motion for each pixel/block in column 1 and in lines 6-8. Wherein the cited limitations

have not been amended or cancelled to over come the cited art, and therefore the

rejections of 12 July 2006 for claim 13 and 16 and 17 are still valid.

Furthermore Claim 13 recited steps for a computer computation processes

internal to the calculation steps with adjustments to a formulaic value wherein the

detecting steps and calculations steps are internal abstract computer processes and fail

to show any clear and concrete function and appear to be directed to non-statutory

subject matter with new 101 issues. Cancellation of the claims or corrections by

amendment is required.

See MPEP 2106 and United States Patent and Trademark Office Interim

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http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm.

Claim Rejections - 35 USC § 101

8.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9.   Claims 8-12 and 13-17 are rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory matter.

Claim 10 a method is drawn to a computation method for sequentially inputting

fields with method steps for detecting motion value wherein the data is stored as motion

values for each pixel block with internal computer processes for correction data values

with method steps for calculation and adding and subtracting stored values using

internal computation and processes that are internal to the computer and which fail to

show the clear concrete and tangible result or provide for data storage on a media or

provide useful output to the user or workstation.

For example;

Claim 10 lacks a useful, concrete, and tangible result. The claim is directed to

manipulation of ideas that are abstract in nature, as performing of the method does not

result in an outcome that is for example, displayed, stored, or <u>outputted to a user</u> or

work station etc., by means of a tangible medium. Because there is not a storage media

or outputted data on a display or similar device for output for a user, the claim is non-

statutory and comprises computation processes that show no clear concrete tangible

result.

For the result to be tangible it would need to output to a user or displayed to a

user or stored on data media for later usage. Hence the claims are treated as non-

statutory functional descriptive material (See MPEP Section 2106).

Dependent claims 8 and 9 and 11 and 12 are based on rejected claim 10 and are

rejected for at least the reason cited above and are rejected as they do not perform any

steps further resulting in a useful, concrete, and tangible result in combination.

Any change in the claim limitations need to find support in the specification and in

the drawings. The drawings are missing the computer and storage mediums. No new

matter may be added.

Claim 13 is drawn to a moving image processor for sequentially inputting field

data for detecting motion value wherein the data is stored as motion values for each

pixel block with internal computer processes for correction data values with steps for

calculation stored values using internal computation and processes that are internal to

the computer and which fail to show the clear concrete and tangible result or provide for

data storage on a media or provide useful output to the user or workstation.

For example;

Claim 13 lacks a useful, concrete, and tangible result. The claim is directed to

manipulation of ideas that are abstract in nature, as performing of the moving image

processor does not result in an outcome that is for example, displayed, stored, or

<u>outputted to a user</u> or work station etc., by means of a tangible medium. Because there

is not a storage media or outputted data on a display or similar device for output for a

user, the claim is non-statutory and comprises computation processes that show no

clear concrete tangible result.

For the result to be tangible it would need to output to a user or displayed to a

user or stored on data media for later usage. Hence the claims are treated as non-

statutory functional descriptive material (See MPEP Section 2106).

Dependent claims 14-16 are based on rejected claim 13 and are rejected for at

least the reason cited above and are rejected, as they do not perform any steps further

resulting in a useful, concrete, and tangible result in combination.

Any change in the claim limitations need to find support in the specification and in

the drawings. The drawings are missing the computer and storage mediums. No new

matter may be added.

Claim 17 is drawn to a machine readable storage with limitations removing

spurious still and motion regions during detection based on added and subtracted

computations using image field data wherein the required computer and computer

storage apparti using internal computation and processes that are internal to the

computer and which <u>fail to show the clear concrete and tangible result or provide for</u>

<u>data storage on a media or provide useful output to the user or workstation</u>.

For example;

Claim 17 lacks a useful, concrete, and tangible result. The claim is directed to

manipulation of ideas that are abstract in nature, as performing of the moving image

processor does not result in an outcome that is for example, displayed, stored, or

outputted to a user or work station etc., by means of a tangible medium. Because there

is not a storage media or outputted data on a display or similar device for output for a

user, the claim is non-statutory and comprises computation processes that show no

clear concrete tangible result.

For the result to be tangible it would need to output to a user or displayed to a

user or stored on data media for later usage. Hence the claims are treated as non-

statutory functional descriptive material (See MPEP Section 2106).

See MPEP 2106 and United States Patent and Trademark Office Interim

Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility

OG Notices: 22 November 2005 and the 101 issues as found in the inter-net location,

http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm.

Claim Rejections - 35 USC § 102

10.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public
use or on sale in this country, more than one year prior to the date of application for patent in the United
States.

11.   Claims 13 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by

Ishii et al., in (US 5, 111,511).

Regarding claim 13, Ishii et al. teaches a motion detector detecting motion information values representing presence and absence of a motion for each pixel/block of an input nth image field (column 1, lines 6-8); and a motion calculator adjusting according to a formulaic value the detected motion information values of the input nth image field based upon motion information values of an input n+1th image field (column 5, lines 14-34).

As to dependent claim 14-16, which stand rejected as based a rejected base claim and are objected too,

As to dependent claim 16, Ishii et al. teaches that the motion information values are adjusted according to a formula $V(i,j) = V(i,j) + T1$ or a formula $V(i,j) = V(i,j) - T2$, and wherein $V(i,j)$ represents a motion information value for jth pixel on line ith of the input nth image field, and T1 and T2 are random first and second values within a predetermined range, respectively (see Fig. 2(b)).

12.   Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Hamada et al., in (US 5,568,196).

Regarding claim 17, Hamada et al. teaches removing spurious still regions and spurious motion regions during an image field motion detection, based upon a limited added to or a limited subtracted from, pixel motion information values of a current image field using only immediately preceding and succeeding image fields to the current image field (column 3, lines 33-48).

Allowable Subject Matter

13.   Claims 14 and 15 are objected to as being dependent upon a rejected base claim 13, but would be allowable if the 35 USC 101 and 102 (b) rejections above are over come and if the claim limitations are rewritten in independent form to including all of the limitations of the base claim 13 and any intervening claims.

14.   The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for the indication of allowability of claim 14 is the inclusion of the limitation that the motion calculator calculates a mixed valued (a) according to the adjusted detected motion information values of the input nth image field and outputs the mixed value to a de-interlacing processor outputting an image frame based upon the mixed value. It is this limitation in the claimed combination that has not been found, taught, or suggested by the prior art of record that makes these claims allowable.

15.   Claims 2-6 are allowed.

16.   The following is an examiner's statement of reasons for allowance:

Please see the previous office action and applicant's response for reasons for allowance.

17.   As claims 2-6 were previously indicated as allowed and claims 8-12 are rejected under 101 issues and 102 (b) issues and claims 13-16 and claim 17 are rejected under 101 and 102 (b) issues and the allowable material has been indicated for claims 2-6, the cancellation of claims 8-17 or the RCE with amendments to correct the 35 USC 101 and 102 (b) issues are in order.

FINAL

18.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Conclusion

19.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Victor J. Taylor whose telephone number is 571-272-

2281. The examiner can normally be reached on 8:00 to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John E. Barlow can be reached on 571-272-2863. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Victor J. Taylor
Examiner
Art Unit 2863

2/14/2007.
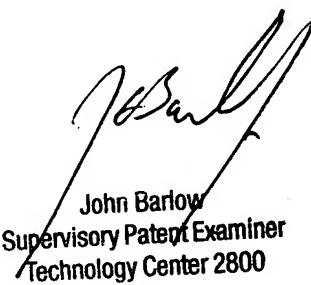
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